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# Royal Institution of Great Britain.

WEEKLY EVENING MEETING,

Friday, March 15, 1872.

SIR HENRY HOLLAND, Bart. M.D. D.C.L. F.R.S. President,  
in the Chair.

JOHN EVANS, Esq. F.R.S. F.S.A. &c.

*On the Alphabet and its Origin.*

THE subject of the Alphabet and its Origin is one which has attracted the attention of many observers, and must indeed at some time or other have forced itself on the consideration of nearly all thoughtful minds.

What is the meaning of those six-and-twenty symbols which serve to render our language visible? Why have they assumed the forms in which we now find them? and whence have they been derived to us? These are questions which most of us must have asked, and many of us may have attempted to answer.

Gesenius, de Vogüé, and Lenormant on the Continent; Professor Hewitt Key, Professor Rawlinson, and Mr. E. B. Tylor in England, as well as others, have done much to throw light on this field of research, and have left but little room for after-comers to add to the stock of information on the subject.

The questions connected with it appear to divide themselves under three heads:—

1. As to the origin of writing and the method of its development in different parts of the globe.
2. As to the original Alphabet from which that in common use amongst us was derived: and
3. As to the history and development of that original Alphabet.

The art of writing is that by which, as Bacon says, "the images of men's minds remain in books for ever, exempt from the injuries of time, because capable of perpetual renovation." It is that by which human knowledge has become cumulative, so that the stores acquired during one generation are handed down to those which succeed; and is indeed one of the most important characteristics which distinguish civilized from savage races of man.

So mysterious does this power of conveying information to others, however remote, appear to savages, that they regard written documents as possessed of powers no less than magical, and have been known to

hide them at the time of committing a misdeed which they feared might be discovered by their means. Yet many of those in the lower stages of civilization have some ideas as to pictorial records.

The cave-dwellers of the south of France at a time when the use of metals was unknown, and when reindeer formed one of the principal articles of food in that part of the world, possessed considerable powers of drawing and of sculpture. On some of their bone instruments figures of animals are engraved, which possibly may to the original owners have conveyed some reminiscences of scenes they had witnessed when hunting. Among the Esquimaux such records are frequently carved on their weapons, and the taking of seals and the harpooning of whales are often depicted. Capt. Beechey says that he could gather from these representations a better insight into the habits of the people than could be obtained from any signs or other intimations.

Among the North American Indians the system of picture writing has been more fully developed, and numerous instances are recorded in Schoolcraft's 'Indian Tribes.' A census roll of 1849 gives the details of 34 families comprising 108 souls, by means of symbols for the names of families, such as Catfish, Beaverskin, &c., with marks below showing the number of individuals in each. Records of the events of a deceased warrior's life are often given on his tombstone in much the same manner. The *totem* of his tribe, such as the Reindeer or the Crane, is reversed to show that he is dead; there are marks recording his war parties and wounds, the number of enemies he has killed, or the eagles' feathers he has received for bravery. Even love and war songs are symbolized by a kind of pictorial *memoria technica*, and the record of a night's encampment with details of a party of sixteen, how they had supped, and what they had for supper, has been depicted on a small scrap of birch-bark.

In Mexico, the art of pictorial representation had at the time of the Conquest been carried to great perfection. The bulk of the pictures, however, merely represent wars, migrations, famines, and scenes of domestic life. They were, moreover, able to record dates by means of an ingeniously-devised cycle, and had some idea of attaching a phonetic value to their symbols. Thus the name of Itz-coatl, the fourth king of Mexico, is found represented by a snake with knives of obsidian issuing from its back—the reason being, that the word Itzli meant knives of obsidian, and Coatl meant snake. The same name was also symbolized by the representation of a knife, a pot and water, which shows an approach to a syllabic system of symbols. For the names of the objects, if given at length, would form Itzli-Comitl-Atl, so that the pot—Comitl—would appear in composition merely to have represented Co—. At a somewhat later date, we find the words Pater Noster represented by a flag, a stone, a prickly pear, and a stone. Pantli being a flag, Tetl a stone, and Nochtli a prickly pear. Here also the first and third symbols appear in composition to have been monosyllabic, and the Aztec version of the Latin seems to have

been Pan-tetl Noch-tetl. What might have been the results of the development of such a system, we shall never know, as it was brought to a close by intercourse with Europeans.

In Peru, though some sort of hieroglyphic writing appears to have been known, the chief substitute for writing was the Quipu or knotted cord. This consisted of a main cord with strings of different colours and lengths attached. The colour, the mode of making the loops, knots, or tufts, their distance from the main cord or from each other, had all of them their meaning. Each Quipu had its own keeper or interpreter, and by their means all public accounts were kept. The Wampum in North America was of somewhat similar character, and in Polynesia also the same sort of Quipu is in use. One kept by the principal tax-gatherer in Hawaii, is a knot of cord of 400 or 500 fathoms in length, subdivided again and again for the different districts and families.

There is a tradition among the Chinese of a similar system of recording events by means of a knotted cord having been in use among them previous to the invention of writing. The Chinese system of writing, though far superior to that of the Mexicans, is still not alphabetical but syllabic. At the outset, the characters seem to have been pictorial, but the representations of the objects have now become so much conventionalized and changed, partly in consequence of the method of writing by means of a brush, that there is much difficulty in recognizing them. In the characters representing the words Sun or Day, Moon, Door, Carriage, Boy, the original pictorial origin is evident, as indeed it is in several other instances.

In some cases compound characters are formed by the junction of others of a simple kind. The Sun and Moon together represent the word *Ming*, bright or clear; Water and Eye together symbolize tears.

With a monosyllabic language, the words of which are of necessity limited in number, one sound has often to represent more than one sense, and the Chinese characters have therefore been divided into phonetics or radicals—those which give the sound,—and the classificatory or determinatives, or those which give the sense.

Thus the sign for a *door* with the determinative *an ear*, means to *listen*; with that of a *corpse* or of *the heart*, means *sorrow*, &c.

The Egyptian hieroglyphics present much analogy in character with the Chinese method of writing. In their earliest form they seem to have been principally pictorial, though also at the same time symbolic. We find, for instance, that the representation of the vault of heaven, with a star suspended from it, typifies darkness or night; that the arms of a man holding a spear and shield are the symbol of to fight, and that thirst is typified by a calf running. The next stage would appear to have been syllabic, when a certain sign represented a syllable, though often with a second more truly literal sign affixed, denoting the final consonant of the syllable. To prevent mistakes, the signs representing words were often accompanied by other signs, which were merely determinative of the meaning. Thus three horizontal zigzag lines

representing water, showed that the previous symbol designated something connected with liquids—or two legs walking, that the word bore reference to locomotion. Many hieroglyphics, however, appear to be purely literal, though in the case of consonants often having some vowel-sound implied. These literal hieroglyphics stand for the initial letters of the objects or ideas they represent. For instance, a goose flying is the equivalent of P, the initial of *Pai*, to fly; an owl stands for M, the first letter of *Mulag*, the Egyptian name of the bird.

The more careful pictorial representations of the objects such as are to be seen in sculptured hieroglyphics and in formal inscriptions, required, however, too much time for their execution to be adopted as an ordinary means of writing. In consequence, the signs became conventionalized, and the salient characteristics of the object were seized on for the more cursive form of writing known as the hieratic. From this again was derived the writing known as demotic, in which many of the symbols have become so much changed and simplified, that it is with difficulty that they can be identified as descendants of originally pictorial forms.

A modified form of hieroglyphic writing is still in use among us, more especially in connection with the science of astronomy; and the conventional forms which now represent the signs of the Zodiac are very instructive as to the amount of modification such symbols are liable to undergo.

In Aries ( $\varphi$ ) and Taurus ( $\sigma$ ) the heads of the ram and the bull may still be recognized. Gemini is represented by the twin straight lines,  $\Pi$ ; Cancer by its claws,  $\overline{\sigma\sigma}$ ; and Leo by its head and tail,  $\Omega$ . In the symbol for Virgo there appears to have been some confusion between Astræa and the Virgin Mary, the sign being symbolized by the letters  $\text{m}\text{b}$   $\text{m}$ . The scales of Libra, the sting of Scorpio, and the arrow of Sagittarius, can still be traced in the symbols,  $\underline{\sigma}$ ,  $\text{m}$ ,  $\text{f}$ . The twisted tail of Capricornus survives in  $\text{W}$ , and Aquarius is represented by two wavy lines of water,  $\text{w}$ . The remaining sign of Pisces has been much metamorphosed, but the two fishes, back to back, with head and tail alternating, can readily be reconstructed from the symbol  $\text{X}$ .

The gradual simplification of form exhibited in these signs, and in the Chinese and hieratic systems of writing, must be borne in mind when studying the development of other systems.

With regard to the origin of the alphabet in common use in Europe there can be no doubt; the testimony of classical historians, as well as that of the letters themselves, being conclusive as to its Phœnician source. The Greek myth of letters having been introduced by Cadmus the Phœnician, seems simply to embody this truth, for there is much probability in the view which connects the name of Cadmus with the Semitic word Kedem, the East.

At what date letters were first in use in Greece is by no means certain, but Grote thought that they were absolutely unknown in the days of Homer and Hesiod (B.C. 850-776). It seems, however,

probable that they were introduced at a somewhat earlier date. If the date which has been assigned to the famous "Moabite stone," of about 900 B.C., be correct, the correspondence in form between the archaic Greek letters and those on the stone raises a strong presumption in favour of letters having been imported into Greece at the time when the Phœnician alphabet was in that stage of development in which it occurs on the stone.

Even the name of the alphabet preserves the memory of its Phœnician origin, for Alpha and Beta, the names of the two letters from which the word is derived, are not really Greek, but merely the Hellenized forms of the Phœnician Aleph and Beth. The same is the case with the names of all the other Greek letters down to Tau; the last five letters,  $\Upsilon$ ,  $\Phi$ ,  $\chi$ ,  $\Psi$ ,  $\Omega$ , being of later introduction.

The correspondence in form between the Roman, the Greek, and the early Phœnician alphabet, as given on the Moabite stone, can readily be traced. It must, however, be remembered that the letters of the latter are written from right to left, or in the same manner as Hebrew, and not, as is the case with us, from left to right. In the early Greek inscriptions it appears to have been a matter of indifference in which direction the letters were placed. In some the lines are alternately in either direction, and this form of writing was known as Boustrophedon, or that which turned backwards and forwards like an ox in ploughing.

In tracing the correspondence between the Roman, Greek, and Phœnician alphabets, but little need be said with regard to most of the letters.

**A.**—Alpha, or Aleph, was at the outset, like most of the letters which have now become vowels, rather a representative of a vowel-sound than of an absolute vowel.

**B.**—Beta, or Beth, has to a great extent preserved its sound, though originally softer and more like V.

**C.**—Gamma, or Gimel, affords an illustration of change in the power of a symbol, the Greek  $\Gamma$  having become the Latin C. There are indeed several words which until a comparatively late date were written indifferently with a C or a G, as Caius and Gaius; Cneius and Gneius.

**D.**—Delta, or Daleth, requires no comment.

**E.**—Epsilon, or He, was originally an aspirate, but, like some other aspirates to which probably some vowel-sound was as it were attached, it gradually softened into a vowel.

**F,** or Vau. This letter has dropped out of the Greek alphabet, but is found on coins and early inscriptions as the Bau or Digamma, and as the representative of the numeral 6.

**G.**—Zeta, or Zain. It may seem strange that the Greek Z is represented by the Latin G, a letter which is said to have been introduced by Carbilus. The sound, however, of the Greek Z appears to have been somewhat like Ds, which readily slides into a soft G. One form of the Greek Zeta,  $\zeta$ , corresponds closely with an early form of G.

**H.**—Eta or Cheth affords another instance of an aspirate becoming a vowel in Greek, though it retains its aspirate character in Latin, as indeed it did in some early Greek inscriptions.

—Theta or Teth has disappeared in the Latin, though it was retained in the Etruscan alphabet, and moreover is found as a barred  $\Theta$  on ancient British and Gaulish coins, and reappears in Saxon as  $\mathfrak{D}$ .

**I. J.**—Iota or Jod. This letter, from the name of which our word jot is derived, though originally as large as any of the other letters, becomes the smallest in some alphabets, such as those in use on Cilician coins of the fourth century, B.C., and on *stélés* and *papyri* from Egypt of the first three centuries B.C. It was about that time that the square characters in which Hebrew is now written were gradually being developed from the older forms of letters.

**K.**—Kappa or Caph. In Latin words this letter only occurs joined with A, as if possibly the original form had been syllabic. In the same manner Q occurs only with U.

**L.**—Lambda or Laméd.

**M.**—Mu or Mem.

**N.**—Nu or Nun, requires no comment. It has been supposed by some that the word *elementa*, occasionally applied as the Latin name for letters, was compounded from these L.M.N. Such a derivation is, however, by no means certain.

—Xi or Samech. This letter is unknown in the Latin alphabet. The correspondence in form of the early Greek  $\Xi$  and the Samech of the Moabite stone shows their identity; though Gesenius thought that the Greek Sigma was derived from the Samech, and that when the Sigma coalesced with the Doric San—the equivalent of Shin,  $\Xi$  was put in the vacant place.

**O.**—Omicron or Ain, like some other vowels, was originally an aspirate, or rather a strong guttural.

**P.**—Pi or Pe are the same letter, though the second stroke of  $\Pi$  was lengthened to distinguish it from  $\Gamma$  and P.

—Tsade appears never to have come over into the Greek or Latin alphabets.

**Q.**—Koppa or Koph has become obsolete in Greek, though found on coins and in inscriptions, and retained as the numeral for 90.

**R.**—Rho or Resh has in Greek retained the form of P, from which in Latin it was necessary to distinguish it by a tail. The same necessity did not exist in Greek, where the Latin P is represented by  $\Pi$ .

**S.**—Sigma or Shin. This letter has in Latin entirely lost its angularity, while in Greek the  $\Sigma$  was placed vertically instead of horizontally, as in the Phœnician, on account of its resemblance to M.

**T.**—Tau or Tau. With this letter the original alphabet terminates.

The other letters of our alphabet are in some cases, like X, almost superfluous, in others, like U and Y, different forms of the same Greek letter; and in the case of Z, an old form reintroduced with a fresh value.

As to the original identity of the three alphabets which have been

discussed, there can be no doubt; neither can any exist as to the order in which the letters were originally arranged. For in the Hebrew Scriptures, the language of which may practically be regarded as the same as the Phœnician, there are several instances in which a succession of passages, each commencing with a different letter of the alphabet, present them in this order. A well-known example is afforded by the 119th Psalm, each of the twenty-two sections of which commences with a different letter, the name of which forms the heading to each in the English version of the Bible.

When, however, we come to consider the history and development of the Phœnician alphabet, we are no longer upon so sure a footing. The manner in which some other forms of writing, such as the Chinese and the Egyptian hieratic were developed, will have prepared us for the probability of the Phœnician alphabet having also been evolved from a pictorial source, and for finding in it a similar history to that recorded in the nursery rhyme—

A was an Archer and shot at a frog,  
B was a Butcher and had a big dog.

It is a by no means unimportant fact in reference to this view, that the names of the Phœnician or Hebrew letters are not arbitrary, but each significant of some object; though the meaning of the names cannot in all cases be recognized with absolute certainty. For instance, Aleph, Beth, Gimel, and Daleth, mean Ox, House, Camel, Door, and if we find that these and the succeeding letters, when in their most primitive forms (so far as known) present similarities with the whole or a portion of the objects by the names of which they are distinguished, there is a strong probability of a pictorial origin for the letters.

Taking the forms of the letters, as given on the Moabite stone, in conjunction with the meaning of their names, such a similarity can in all cases be traced, though more certainly intentional in some letters than in others. This will be best shown in a tabular form. \*

א Aleph.	An ox .. .. .	<i>The head of an ox.</i> —That this letter was known to embody this symbol is recorded by Hesychius about A.D. 380. The correspondence of a small a or a with the sign for Taurus when placed horizontally is worth notice, α.
ב Beth..	A house, or possibly a tent.	<i>A house, showing one wall and the ridged roof.</i>
ג Gimel	A camel .. .. .	<i>The head and neck of a camel.</i>
ד Daleth	A door .. .. .	<i>The triangular door of a tent.</i>
ה He ..	A lattice or window	<i>A lattice?</i> —The meaning of the name of this letter is somewhat doubtful.
ו Vau ..	A peg or nail .. ..	<i>A peg.</i>
ז Zain ..	A weapon .. .. .	<i>An arm holding a spear?</i>
ח Cheth	An enclosure, or field	<i>An enclosure.</i> —Much like the Chinese figure for the same meaning.

\* The letters are here given in the ordinary Hebrew character instead of the older form.

𐤀	Teth ..	A serpent .. ..	<i>A coiled snake.</i> —This letter does not occur on the Moabite stone.
𐤁	Jod ..	The hand .. ..	<i>The hand and wrist in profile</i> , similar to what may be seen on some early Hindu coins.
𐤂	Caph ..	The palm of the hand.	<i>An open hand</i> , as in some drawings of the North American Indians.
𐤃	Lamed	An ox-goad .. ..	<i>An ox-goad?</i> —The meaning of the name somewhat doubtful.
𐤄	Mem ..	Water .. ..	<i>A wavy line.</i> —Like the representation of water on early coins and sculpture, and as in the sign Aquarius ♊.
𐤅	Nun ..	A fish .. ..	<i>The head, gill, and back of a fish.</i>
𐤆	Samech	A support .. ..	<i>A kind of prop supporting a trellis for vines.</i> —Mr. Hensleigh Wedgwood has pointed out the similarity of this letter to the figure of a sculptor's bench or easel in Egyptian pictures.
𐤇	Ain ..	The eye .. ..	<i>The pupil of the eye</i> , as in Egyptian hieratics.
𐤈	Pe ..	The mouth .. ..	<i>The two lips open at an angle</i> , much like the mouth as represented on some ancient British coins.
𐤉	Tsade	A reaping hook ..	<i>A reaping hook or scythe attached to its handle.</i>
𐤊	Koph	The back of the head?	<i>The head and neck?</i>
𐤋	Resh ..	The head .. ..	<i>The head in profile.</i>
𐤌	Shin ..	A tooth .. ..	<i>A tricuspid tooth.</i>
𐤍	Tau ..	A mark .. ..	<i>A cross</i> , like the mark still made by those who cannot write.

This correspondence in form can hardly be appreciated without diagrams, but in many instances is striking, and in none absolutely forced. There have, however, been numerous objections raised to such a view of the derivation of the forms of the Phœnician letters.

Lenormant and de Rougé would rather trace them to Egyptian hieratic characters, but the resemblances they point out between them are but slight, and in no instance does the Phœnician name of the letter agree with that of the object represented by the Egyptian hieratic. Moreover the resemblances, when traced, are rather with later forms of Phœnician letters than with those on the Moabite stone.

Mr. E. B. Tylor also considers that the theory maintained by Gesenius of the Phœnician letters being pictorial, can be shown to be unsafe. He thinks the resemblances between the letters and the objects to be but small, and the bond which attaches the name to the letter to be but slight; that the coincidences are not primary and essential, but secondary and superficial. In support of this view he instances the old Slavonic alphabet, and the Runic *Futhorc*, in which the letters have names unlike those of our alphabet, but each with a meaning—the initials of the names giving the power of the letters. He suggests that in a similar manner Hebrew words may have been



chosen as names for letters derived from some extraneous source, such names having the proper initial letter, and also some suitability to describe its shape—the same as if in English we called

**A**—Arch or Arrowhead.

**B**—Bow or Butterfly.

**C**—Curve or Crescent.

This, however, is contrary to all analogy among methods of writing of which we know the development, and moreover, several of the names of the Hebrew letters are not actual words in common use in the Hebrew writings, but words which have become obsolete, and of which in one or two cases it is hard to recover the meaning. The letters, moreover, cannot originally have been mere arbitrary signs, or there would have been greater distinctions between some of them, such as it was subsequently found desirable to introduce.

If too, the Phœnician letters came from an extraneous source, we may well ask where it was, and how does it happen that no traces of the original names of the letters have been preserved. In the Greek alphabet, which is undoubtedly derivative, the names of the letters would alone suffice to show the source from which it came; and the case of the Runic alphabet, derived from the same source, though with the letters rearranged and with new names given at a comparatively recent date, seems hardly to apply. The Runic names, moreover, exhibit no attempt to denote the forms of the letters, to which they are as inapplicable as the names in one of the Irish alphabets, in which each letter is called by the name of some tree.

It seems, on the contrary, far more probable that the Phœnicians, possibly in the first instance borrowing the idea from the Egyptians, struck out for themselves a more purely literal and therefore a more simple and useful alphabet. A classification of sounds once established, and a system of syllabic symbols once invented, the transition to a pure literal alphabet is comparatively easy, especially when once the syllabic symbols have, from the introduction of foreign words or from other causes, been employed for the initial sound only of the syllables they represent.

Such a change, involving a departure from old practice, might perhaps more readily take place in an adjacent country to that in which the syllabic system prevailed, than in the country itself; and we may readily conceive a practical people like the Phœnicians importing from Egypt a system of pictorial writing thus modified.

Certainly their alphabet, unlike the letters of the later class of Egyptian hieroglyphics, does not appear to consist of merely a few survivors from a whole army of symbols. On the contrary, it seems to present some traces of arrangement; for the objects representing the letters appear to be grouped in pairs, each comprising two objects in some manner associated with each other; and between each pair is inserted a third letter, represented by an object not so immediately connected with those preceding it, but still not absolutely alien from them.

Thus the ox and the house are followed by the camel—an animal, by the way, not represented in Egyptian hieroglyphics. The door and the window are followed by the peg; the weapon and enclosure by the serpent; the hand and the palm by the ox-goad; the water and the fish by the support; the eye and the mouth by the reaping-hook; the head and the back of the head by the tooth; and the alphabet concludes with the final mark, ×.

It would be superfluous to attempt to point out the bearings of this question of the origin and development of the Phœnician alphabet on the history of civilization in Europe and Western Asia.

Future discoveries may possibly bring us nearer the cradle of this alphabet, but it seems probable that on the Moabite stone we find the letters still retaining enough of their original pictorial character to justify a belief that they there occur in a comparatively early stage, and not removed by many centuries from the time when they were merely delineations of the objects, the names of which they have preserved. Assuming this to have been the case, what is the stage of culture to which the inventors of this alphabet appear to have attained?

They were not mere nomads or hunters, but a people with fixed dwellings for themselves and enclosures for their cattle. They were acquainted with agriculture, and had domesticated animals, and employed the ox as a beast of draught to cultivate fields, the produce of which they reaped with metallic sickles. In fact, their civilization would seem to have been at least equal to that of the bronze-using people of the Swiss lake-dwellings.

[J. E.]

